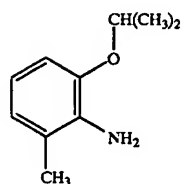


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Starting Materials of the Formula (X):

Example (X-1)



Step 1: Preparation of 2-isopropoxy-6-methyl-nitrobenzene

A mixture of 153 g (1.0 mol) of 3-methyl-2-nitro-phenol, 172.5 g (1.25 mol) of potassium carbonate, 170 g (1.0 mol) of 2-iodo-propane and 400 ml of acetone is heated under reflux for 12 hours. It is subsequently concentrated under a water pump vacuum, the residue is stirred with 400 ml of methylene chloride, the mixture is filtered and the filter product is washed with methylene chloride. The solvent is removed carefully from the filtrate by distillation under a water pump vacuum.

183.4 g of 2-isopropoxy-6-methyl-nitrobenzene are obtained as a yellow oily residue.

¹H-NMR (CDCl₃, TMS, δ, ppm): 1.33 (d, J=6.1 Hz, 2×CH₃), 2.28 (s, CH₃), 4.6 (sept., J=6.1 Hz, 1H), 6.8 (d, J=7.7 Hz, 1H), 6.87 (d, J=8.4 Hz, 1H), 7.26 (pseudo t, J=8.1 Hz, 1H).

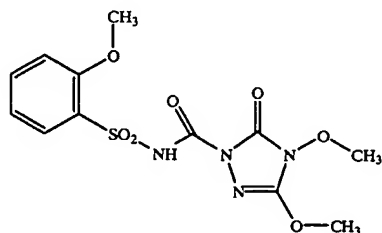
Step 2: Preparation of 2-isopropoxy-6-methyl-aniline

183.3 g (0.94 mol) of 2-isopropoxy-6-methyl-nitrobenzene are hydrogenated in 1 litre of ethyl acetate in the presence of 9.5 g of Raney nickel under a hydrogen pressure of from 40 to 60 bar for 5 hours. The mixture is then filtered and the solvent is carefully removed from the filtrate by distillation under a water pump vacuum.

139.4 g (90% of theory) of 2-isopropoxy-6-methyl-aniline are obtained as an orange-coloured oily residue. ¹H-NMR (CDCl₃, TMS, δ, ppm): 1.36 (d, J=6.1 Hz, 2×CH₃), 2.16 (s, CH₃), 3.72 (s, NH₂), 4.51 (sept., J=6.1 Hz, 1H), 6.65–6.70 (m, 3H).

USE EXAMPLES

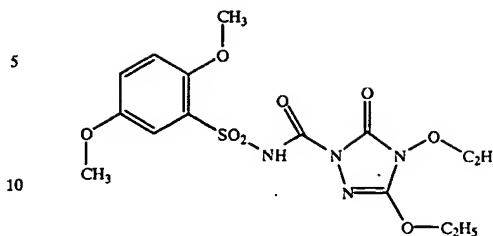
In the Use Examples, the compounds specified below are used as comparison substances



4,5-Dimethoxy-2-(2-methoxy-phenylsulphonylaminocarbonyl)-2,4-dihydro-3H-1,2,4-triazol-3-one (known from EP 534266);

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(B)



4,5-Diethoxy-2-(2,5-dimethoxy-phenylsulphonylaminocarbonyl)-2,4-dihydro-3H-1,2,4-triazol-3-one (known from EP 534266).

Example A

Pre-emergence Test

Solvent: 5 parts by weight of acetone

Emulsifier: 1 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amount of solvent, the stated amount of emulsifier is added and the concentrate is diluted with water to the desired concentration.

Seeds of the test plants are sown in normal soil, and, after 24 hours, the soil is watered with the preparation of the active compound. It is expedient to keep constant the amount of water per unit area. The concentration of the active compound in the preparation is of no importance, only the amount of active compound applied per unit area being decisive.

After three weeks, the degree of damage to the plants is rated in % damage in comparison to the development of the untreated control. The figures denote:

0%=no action (like untreated control)

100%=total destruction

In this test, the compounds according to Preparation Examples 1, 7–21, 23–41, 46–49, 51, 54, 55, 57, 60, 62, 65, 68, 72–74, 76, 78, 79, 88, 89, 199, 207, 209, 222 and 901 for example, exhibit a very strong action against broad-leaved weeds.

Example B

Post-emergence Test

Solvent: 5 parts by weight of acetone

Emulsifier: 1 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amount of solvent, the stated amount of emulsifier is added and the concentrate is diluted with water to the desired concentration.

Test plants which have a height of 5–15 cm are sprayed with the preparation of the active compound in such a way as to apply the particular amounts of active compound desired per unit area. The concentration of the spray liquor is chosen so that the particular amounts of active compound desired are applied in 2,000 l of water/ha. After three weeks, the degree of damage to the plants is rated in % damage in comparison to the development of the untreated control.

The figures denote:

0%=no action (like untreated control)

100%=total destruction

In this test, the compounds according to Preparation Examples 1, 7–10, 12, 13, 15, 16, 17, 25, 30, 31, 38, 40, 41,